

HEWLETT-PACKARD COMPANY Intellectual Property Administration P.O. Box 272400 Fort Collins, Colorado 80527-2400

PATENT APPLICATION

ATTORNEY DOCKET NO. \_\_\_\_

200311799-1

### IN THE

## UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s):

Yong Boon Ho et al.

**Confirmation No.:** 

Application No.: 10/768,934

Examiner: Nicholas R. Taylor

Filing Date:

February 2, 2004

**Group Art Unit:** 

2141

Title: METHOD FOR MANAGING A NETWORK USING A PLURALITY OF DATABASE

Mail Stop Appeal Brief-Patents **Commissioner For Patents** PO Box 1450 Alexandria, VA 22313-1450

	TR	ANSMITTAL OF APP	PEAL BRIEF		
Transmitted herewith is the Appeal Brief in this application with respect to the Notice of Appeal filed on May 27, 2008					
The fee for filing this Appeal Brief is \$510.00 (37 CFR 41.20).					
	□ No Additional Fee Required.				
(complete (a) or (b) as applicable)					
The proceedings herein	The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.				
(a) Applicant petition months checked	ns for an extension of below:	time under 37 CFR 1	1.136 (fees: 37 CFF	R 1.17(a)-(d)) for t	he total number of
1s	st Month \$120	2nd Month \$460	3rd Month \$1050	4th M \$16	
☐ The extension fee	e has already been filed	d in this application.			
(b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.					
Please charge to Deposit Account 08-2025 the sum of \$510 . At any time during the pendency of this application, please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.					
A duplicate copy of t	this transmittal letter is	enclosed.			
Date: Voly 28, 20	008		Respectfully submit Yong Boon Ho et a		
I hereby certify that this documer Service Window Ra Alexandria, VA 22314, of the the date indicated above.  By:  (Attorney Signature as	andolph Building, 401 Du	lany Street rademark Office on	Patrick C. Keand Attorney/Agent f Reg No. : Date :	or Applicant(s) 32,858 July 28, 2008	
( ) <u></u>			Telephone :	(703)838-6522	



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	(complete (a) or (b) as applicable)			
	The proceedings herein are for a patent application and the provisions of 37 CFR 1.136(a) apply.			
	(a) Applicant petitions for an extension of time under 37 CFR 1.136 (fees: 37 CFR 1.17(a)-(d)) for the total number of months checked below:			
	☐ 1st Month			
	☐ The extension fee has already been filed in this application.			
	(b) Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition and fee for extension of time.			
. •	Please charge to Deposit Account 08-2025 the sum of \$510 . At any time during the pendency of this application please charge any fees required or credit any over payment to Deposit Account 08-2025 pursuant to 37 CFR 1.25. Additionally please charge any fees to Deposit Account 08-2025 under 37 CFR 1.16 through 1.21 inclusive, and any other sections in Title 37 of the Code of Federal Regulations that may regulate fees.			
	☒ A duplicate copy of this transmittal letter is enclosed.			
Date	Respectfully submitted, Yong Boon to et al. By			
Alex	reby certify that this document is being filed by personal delivery to the tomer Service Window Randolph Building, 401 Dulany Street andria, VA 22314, of the United States Patent & Trademark Office on date indicated above.  Patrick C. Keane  Attomey/Agent for Applicant(s)			
	Reg No. : 32,858			
Ву:	TAC Cree   May No 32, 858   Date : July 28, 2008   (Attorney Signature and Reg. No.)   Telephone : (703)838-6522			



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

În re Pa	atent Application of	
Yong Boon Ho et al.		) Group Art Unit: 2141
Applica	ition No.: 10/768,934	) Examiner: Nicholas R. Taylor
Filed:	February 2, 2004	Appeal No.:
For:	METHOD FOR MANAGING A NETWORK USING A PLURALITY OF DATABASE	

## **APPEAL BRIEF**

## **Mail Stop APPEAL BRIEF - PATENTS**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This appeal is from the decision of the Primary Examiner dated February 27, 2008 finally rejecting claims 1-30, which are reproduced as the Claims Appendix of this brief.

07/29/2008 SZEWDJE1 00800163 082025 10768934 01 FC:1402 510.00 DA

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## I. Real Party in Interest

The present application is assigned to Hewlett-Packard Development Company, L.P. Hewlett-Packard Development Company, L.P is the real party in interest, and is the assignee of Application No. 10/768,934.

## II. Related Appeals and Interferences

The Appellant's legal representative, or assignee, does not know of any other appeal or interferences which will affect or be directly affected by or have bearing on the Board's decision in the pending appeal.

### III. Status of Claims

Claims 1-30 remain pending in the application. Claims 1, 9, 13, 18, 22 and 24 are independent claims.

### IV. Status of Amendments

No amendments were filed after the final rejection dated February 27, 2008.

## V. Summary of Claimed Subject Matter

Appellants have disclosed methods and systems for managing a network using a plurality of databases. By using a plurality of databases, the disclosed methods and systems allow a network topology to remain available during the topology discovery process, allow the network topology to be easily backed up, and allow health of the network to be monitored during the discovery process.

An exemplary method for managing a network using a plurality of databases includes selecting a first one of the plurality of databases that contains a topology of the network, as an active database that is accessible as a READ only database, selecting a second one of the plurality of databases that contains a topology of the network, as a working database for receiving topology updates, discovering a

topology of the network, and updating the second database with the discovered topology, and selecting the second database as the active database.

The disclosed exemplary embodiments can provide multiple advantages. A consistent topology can be made accessible at all times, for example, to clients, users or other entities.

In addition, exemplary embodiments can detect changes that have occurred across two consecutive discovery cycles. This information can be used effectively to troubleshoot the network problems and diagnose the health of the network.

Furthermore, exemplary embodiments can handle a change in the connectivity value without causing inconsistency in the database for the clients of the database. This is due to the fact that the clients are accessing the active database, which remains consistent, while changes such as connectivity value changes are made in the working database.

The exemplary methods and systems are broadly encompassed in the claims.

Pursuant to 37 C.F.R. §41.37(1)(c)(v), the subject matter of independent claims 1, 9, 13, 18, 22 and 24 on appeal are cross-referenced to the specification and/or drawing figures in the following table. The following table is not to be construed as a representation that the portions of the disclosure identified below constitute the sole basis for support of the claimed subject matter.

Claim	Disclosure
A method for managing a network using a plurality of databases, the method comprising:	Paragraph 0002; Figure 2
selecting a first one of the plurality of databases that contains a topology of the network, as an active database that is accessible for providing information related to the topology of the network in a READ only mode;	Paragraphs 0002 and 0014; Figure 2, step 202
selecting a second one of the plurality of databases that contains a topology of the network, as a working database for receiving topology updates;	Paragraphs 0002 and 0014; Figure 2, step 204
discovering a topology of the network, and updating the second database with the discovered topology; and	Paragraphs 0002 and 0014; Figure 2, steps 206 and 208

selecting the second database as the active	Paragraphs 0002 and 0015;
database.	Figure 2, step 222
	Defendance of the second of the second
9. A method for managing a network using a	Paragraph 0002; Figure 1
plurality of databases, the method comprising:	' alagraph 0002, ' igalo '
discovering the network;	Paragrapha 0002 and 0012:
discovering the network,	Paragraphs 0002 and 0013;
	Figure 1, step 104
updating a topology representation of the network in	Paragraphs 0002 and 0013;
a working database based on the discovering;	Figure 1, step 106
simultaneous with the discovering and the updating,	Paragraphs 0002 and 0013;
providing access to a topology representation of the	Figure 1, step 106
network in an active database; and	· · · · · · · · · · · · · · · · · · ·
notwork in an active database, and	
evaluation as the supplier and estimate	Description 0000 and 0010.
exchanging connections of the working and active	Paragraphs 0002 and 0013;
databases.	Figure 1, step 110
13. A system for managing a network using a	Paragraph 0005; Figures 3A-
plurality of databases, the system comprising:	3C and 4
means for discovering a topology of the network and	Paragraphs 0005 and 0028;
updating a topology of the network in a first database	Figures 3A-3C and Figure 4
1 ' " "	
connected to the means for discovering; and	computer
l manana far annanting tha manana far dianavarias ta	1
means for connecting the means for discovering to	Paragraphs 0005 and 0028;
the first database while at the same time connecting	Figures 3A-3C and Figure 4
the first database while at the same time connecting	Figures 3A-3C and Figure 4
the first database while at the same time connecting clients to a second database containing a topology of	Figures 3A-3C and Figure 4 computer (e.g., switches,
the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first	Figures 3A-3C and Figure 4
the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates	Figures 3A-3C and Figure 4 computer (e.g., switches,
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the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates	Figures 3A-3C and Figure 4 computer (e.g., switches,
the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates the topology of the network.	Figures 3A-3C and Figure 4 computer (e.g., switches, interfaces)
the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates the topology of the network.  18. A machine readable medium comprising a	Figures 3A-3C and Figure 4 computer (e.g., switches, interfaces)  Paragraphs 0002 and 0004;
the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates the topology of the network.	Figures 3A-3C and Figure 4 computer (e.g., switches, interfaces)
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the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates the topology of the network.  18. A machine readable medium comprising a computer program for causing a computer to perform:	Figures 3A-3C and Figure 4 computer (e.g., switches, interfaces)  Paragraphs 0002 and 0004; Figure 2
the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates the topology of the network.  18. A machine readable medium comprising a computer program for causing a computer to perform:  selecting a first one of the plurality of databases that	Figures 3A-3C and Figure 4 computer (e.g., switches, interfaces)  Paragraphs 0002 and 0004; Figure 2  Paragraphs 0002, 0004 and
the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates the topology of the network.  18. A machine readable medium comprising a computer program for causing a computer to perform:  selecting a first one of the plurality of databases that contains a topology of the network, as an active	Figures 3A-3C and Figure 4 computer (e.g., switches, interfaces)  Paragraphs 0002 and 0004; Figure 2
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the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates the topology of the network.  18. A machine readable medium comprising a computer program for causing a computer to perform:  selecting a first one of the plurality of databases that contains a topology of the network, as an active database accessible by clients for providing information related to the topology of the network in a READ only mode;  selecting a second one of the plurality of databases	Figures 3A-3C and Figure 4 computer (e.g., switches, interfaces)  Paragraphs 0002 and 0004; Figure 2  Paragraphs 0002, 0004 and 0014; Figure 2, step 202  Paragraphs 0002, 0004 and
the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates the topology of the network.  18. A machine readable medium comprising a computer program for causing a computer to perform:  selecting a first one of the plurality of databases that contains a topology of the network, as an active database accessible by clients for providing information related to the topology of the network in a READ only mode;  selecting a second one of the plurality of databases that contains a topology of the network, as a working	Figures 3A-3C and Figure 4 computer (e.g., switches, interfaces)  Paragraphs 0002 and 0004; Figure 2  Paragraphs 0002, 0004 and 0014; Figure 2, step 202
the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates the topology of the network.  18. A machine readable medium comprising a computer program for causing a computer to perform:  selecting a first one of the plurality of databases that contains a topology of the network, as an active database accessible by clients for providing information related to the topology of the network in a READ only mode;  selecting a second one of the plurality of databases that contains a topology of the network, as a working database for receiving topology updates;	Figures 3A-3C and Figure 4 computer (e.g., switches, interfaces)  Paragraphs 0002 and 0004; Figure 2  Paragraphs 0002, 0004 and 0014; Figure 2, step 202  Paragraphs 0002, 0004 and 0014; Figure 2, step 204
the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates the topology of the network.  18. A machine readable medium comprising a computer program for causing a computer to perform:  selecting a first one of the plurality of databases that contains a topology of the network, as an active database accessible by clients for providing information related to the topology of the network in a READ only mode;  selecting a second one of the plurality of databases that contains a topology of the network, as a working database for receiving topology updates; discovering a topology of the network, and updating	Figures 3A-3C and Figure 4 computer (e.g., switches, interfaces)  Paragraphs 0002 and 0004; Figure 2  Paragraphs 0002, 0004 and 0014; Figure 2, step 202  Paragraphs 0002, 0004 and 0014; Figure 2, step 204  Paragraphs 0002, 0004 and 0014; Figure 2, step 204
the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates the topology of the network.  18. A machine readable medium comprising a computer program for causing a computer to perform:  selecting a first one of the plurality of databases that contains a topology of the network, as an active database accessible by clients for providing information related to the topology of the network in a READ only mode;  selecting a second one of the plurality of databases that contains a topology of the network, as a working database for receiving topology updates; discovering a topology of the network, and updating the second database with the discovered topology;	Figures 3A-3C and Figure 4 computer (e.g., switches, interfaces)  Paragraphs 0002 and 0004; Figure 2  Paragraphs 0002, 0004 and 0014; Figure 2, step 202  Paragraphs 0002, 0004 and 0014; Figure 2, step 204  Paragraphs 0002, 0004 and 0014; Figure 2, steps 206
the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates the topology of the network.  18. A machine readable medium comprising a computer program for causing a computer to perform:  selecting a first one of the plurality of databases that contains a topology of the network, as an active database accessible by clients for providing information related to the topology of the network in a READ only mode;  selecting a second one of the plurality of databases that contains a topology of the network, as a working database for receiving topology updates; discovering a topology of the network, and updating	Figures 3A-3C and Figure 4 computer (e.g., switches, interfaces)  Paragraphs 0002 and 0004; Figure 2  Paragraphs 0002, 0004 and 0014; Figure 2, step 202  Paragraphs 0002, 0004 and 0014; Figure 2, step 204  Paragraphs 0002, 0004 and 0014; Figure 2, step 204

selecting the second database as the active database.	Paragraphs 0002, 0004 and 0015; Figure 2, step 222
22. A machine readable medium comprising a computer program for causing a computer to perform	Paragraphs 0002 and 0004; Figure 1
discovering the network;	Paragraphs 0002, 0004 and 0013; Figure 1, step 104
updating a topology representation of the network in a working database based on the discovering; simultaneous with the discovering and the updating, providing access to a topology representation of the network in an active database; and	Paragraphs 0002, 0004 and 0013; Figure 1, step 106
exchanging connections of the working and active databases.	Paragraphs 0002, 0004 and 0013; Figure 1, step 110
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24. A method for managing a network using a plurality of databases, the method comprising:	Paragraph 0002; Figure 2
connecting a first one of the plurality of databases that contains a topology of the network, as an active database accessible by clients for providing information related to the topology of the network in a READ only mode;	Paragraphs 0002 and 0014; Figure 2, step 202
connecting a second one of the plurality of databases that contains a topology of the network, as a working database for receiving topology updates;	Paragraphs 0002 and 0014; Figure 2, step 204
discovering a topology of the network, and updating the working database with the discovered topology;	Paragraphs 0002 and 0014; Figure 2, step 206
connecting the working database as the active database; and	Paragraphs 0002 and 0015; Figure 2, step 220
connecting one of the plurality of databases as the working database, wherein the database connected as the active database and the database connected as the working database are different databases.	Paragraphs 0002 and 0015; Figure 2, step 222

## VI. Grounds of Rejection to be Reviewed on Appeal

A. Whether The Examiner Has Sufficiently Established that Claims 9-14, 16, 17, 22 and 23 are Anticipated under 35 U.S.C. §102(e) by Beaudoin et al. (U.S. Patent Publication No. 2003/0112958, hereinafter "Beaudoin").

B. Whether The Examiner Has Sufficiently Established that Claims 1-3, 5-8, 18, 19, 21 and 24-30 are Unpatentable under 35 U.S.C. §103(a) over Beaudoin and Gupta (U.S. Patent No. 7,330,859, hereinafter "Gupta").

## VII. Argument

- A. The Examiner Has Not Sufficiently Established that Claims 9-14, 16, 17, 22 and 23 are Anticipated under 35 U.S.C. §102(e) by Beaudoin
  - Beaudoin does not anticipate all features in claims 9-12 and 22-23 related to exchanging connections of the working and active databases

Independent claim 9 is allowable over Beaudoin because Beaudoin does not anticipate all features recited in the claim. For example, claim 9 recites exchanging connections of the working and active databases.

Beaudoin relates to a network management tool. Referring to Fig. 1, a network management processor 7 is coupled to a global database 5, and a local database 6. The global database 5 is also connected to a data collector 4. The data collector 4 collects information sets 16 concerning the devices and links in the network layout. The global database 5 receives and stores information sets 16 from the data collector 4. The information sets 16 represent a substantially real time status of the devices and links in the network layout. The local database 6 is coupled to the network management processor 7 to receive and store portions of the information set 16 corresponding to a user selected overlay information subset, or a snapshot of the information set 16 in the global database 5.

In Beaudoin, the connections of the global database 5 and the local database 6 are static. There is no teaching or suggestion in Beaudoin on exchanging connections of the global database 5 and the local database 6.

In the Office Action dated February 27, 2008, the Examiner contends that in the Beaudoin patent a client may connect to a first database and request that certain operations be performed, after which the "connection is exchanged to a second database." See February 28, 2008 Office Action: the paragraph bridging pages 2 and 3.

Appellant respectfully disagrees that the Beaudoin patent anticipates

Appellant's claim 9. In the Beaudoin patent, the "connection" is the client's

connection, within the client's computer, among databases. In contrast, exemplary

embodiments of the presently claimed invention are not directed to changing a single

client's connection to one of plural databases, but rather, are directed to exchanging

the connections of plural databases (i.e., working and active databases) to a

network. The changing of a client computer's connection in the Beaudoin patent

does not constitute "exchanging connections of the working and active databases,"

as presently claimed.

According to exemplary embodiments of claim 9, the connections of the working database and the active database are exchanged so that a former working database becomes the active database, and the former active database becomes the working database.

In contrast, in Beaudoin, the connections of global database 5 and local database 6 to the network are static, and are never exchanged so that the global database 5 can become the local database 6 and so that the local database 6 can

become the global database 5. For example, Beaudoin's global database 5 is connected to the data collector 4 to directly receive updates. The local database 6 cannot directly receive the updates from the data collector 4 because of the static connection of the global database 5 and the local database 6. Therefore, Beaudoin fails to teach or suggest any ability for exchanging connections of the working and active databases as recited in Appellant's claim 9.

In view of the foregoing, claim 9 is patentable. Claims 10-12 are patentable at least because of their dependency from claim 9. Claims 22 and 23, although of different scope than claim 9, recite similar features and are also allowable for similar reasons.

#### ii. Claim 12

Claim 12 recites partitioning a topology database to form the working database and the active database.

Beaudoin discloses that the local database 6 stores portions of the information set 16 that is stored in the global database 5. See paragraphs 30 and 32. However, Beaudoin does not teach or suggest that the local database 6 and the global database 5 are partitioned from the same database. Therefore, Beaudoin does not teach or suggest the subject matter of claim 12. Claim 12 is patentable for these additional reasons.

iii. Beaudoin does not anticipate all features in claim 13 relating to means for connecting the clients to the first database after the means for discovering updates the topology of the network.

Independent claim 13 is allowable over Beaudoin because Beaudoin does not anticipate all features recited in the claim. For example, claim 13 recites means for discovering a topology of the network and updating a topology of the network in a first database connected to the means for discovering, and means for connecting the clients to the first database after the means for discovering updates the topology of the network.

Beaudoin does not teach or suggest the above recited features of claim 13.

In Beaudoin, the local database 6 does not correspond to the first database since the local database 6 is not connected to a means for discovering.

The global database 5 of Beaudoin is connected to the data collector 4 to receive collected information concerning devices and links in the network. However, there is no teaching or suggestion in Beaudoin to connect clients to the global database <u>after</u> the data collector 4 updates the topology of the network. Therefore, Beaudoin fails to teach or suggest Appellant's claim 13 means for connecting the clients to the first database <u>after</u> the means for discovering updates the topology of the network, as described in claim 13.

In view of the foregoing, claim 13 is patentable. Claims 14, 16 and 17 are patentable at least because of their dependency from claim 13.

- B. The Examiner Has Not Sufficiently Established that Claims 1-3, 5-8, 18, 19, 21 and 24-30 are Unpatentable under 35 U.S.C. §103(a) over Beaudoin and Gupta (U.S. Patent No. 7,330,859).
  - The Combination of Beaudoin and Gupta Does Not Teach or Suggest Each Feature of Claim 1

Claim 1 recites selecting a first database as an active database that is accessible for providing information related to the topology of the network in a READ only mode, and selecting a second database as a working database for receiving topology updates. Claim 1 also recites selecting the second database as the active database. Therefore, according to claim 1, there are two functional databases, with one being a READ only database and the other one receiving updates.

Exemplary embodiments according to claim 1 provide many advantages. For example, exemplary embodiments can handle a change in a connectivity value without causing inconsistency in the database for the clients of the database. This is due to the fact that the clients are accessing the active database, which remains consistent, while changes (such as connectivity value changes) are made in the working database.

The Examiner has correctly conceded that Beaudoin fails to teach or suggest providing an active database in READ only mode. However, the Examiner contends that Beaudoin and Gupta are combinable to provide a read-only access of Gupta in the system of Beaudoin. The Examiner further contends that a read-only access enables reliability and robustness in the case of alternate database failure.

Appellant submits that even if Beaudoin and Gupta are combined in the manner suggested by the Examiner, Beaudoin and Gupta do not teach or suggest each feature of claim 1.

Gupta relates to a database backup system using a primary side and a secondary side. In operation, users can access the primary side and interact therewith. Col. 5, lines 59-60. As transactions execute on the primary side, transaction log entries are created and transferred to the secondary side where they

are replayed to maintain synchronization between the primary side and the secondary side. Col. 5, lines 60-66. In the event of primary side failure, the secondary side takes over in a read-only capacity, providing users with access to database contents but not allowing users to add, delete or modify the database contents. Col. 5, line 66 - col. 6, line 7. Alternatively, the secondary side takes over in a fully operational mode that provides both read and write access. Col. 6, lines 9-11.

Even if Beaudoin and Gupta are combinable in the manner suggested by the Examiner, the resultant combination would at best have disclosed providing a READ only database only when the other database fails. Beaudoin does not even teach or suggest a READ only mode database, and Gupta discloses a READ only secondary database only when a primary database fails. Neither patent discloses use of a "working database" and an "active database" wherein either database can be selected as the "active database" (see claim 1) and wherein the active database provides information in a "READ only mode" (claim 1). Because the Beaudoin and Gupta patents are not directed to the problem Appellant has addressed, these patents (considered individually or in combination) do not teach or suggest the presently claimed feature of changing a selection among two databases, with an "active" database being a READ only database and the other database receiving updates.

In view of the foregoing, claim 1 is patentable. Claims 18 and 24 are patentable for reasons similar to those of claim 1. Claims 2-3, 5-8, 19, 21 and 25-30 are patentable at least because of their respective dependencies.

#### ii. Claim 8

Claim 8 recites detecting a fault in the network; comparing the topologies in the working and active databases; and determining a source of the fault based on the comparing.

The Examiner relies upon paragraphs 0035, 0044 and 0045 of Beaudoin as allegedly disclosing the above features.

Appellant respectfully disagrees. Paragraph 0035 of Beaudoin discloses an overlay view selector 26 that allows selectively presentation of the base model representation of the network layout. Paragraph 0044 of Beaudoin discloses including circumstantially useful information on an augmented overlay view. Paragraph 0045 of Beaudoin discloses that information regarding selected network groups is retrieved from the databases 5, 6 or the data collector 4.

However, the Beaudoin fails to disclose comparing the contents in databases 5 and 6. Therefore, Beaudoin does not anticipate the subject matter of claim 8.

## C. Conclusion

All of Appellant's claims 1-30 are patentable. Reversal of the Examiner's final rejection and allowance of the present application are requested.

## VIII. Claims Appendix

See attached Claims Appendix for a copy of the claims involved in the appeal.

## IX. Evidence Appendix

See attached Evidence Appendix for copies of evidence relied upon by Appellant.

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## X. Related Proceedings Appendix

See attached Related Proceedings Appendix for copies of decisions identified in Section II, <u>supra</u>.

Respectfully submitted,

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### **VIII. CLAIMS APPENDIX**

## The Appealed Claims

1. (Previously Presented) A method for managing a network using a plurality of databases, the method comprising:

selecting a first one of the plurality of databases that contains a topology of the network, as an active database that is accessible for providing information related to the topology of the network in a READ only mode;

selecting a second one of the plurality of databases that contains a topology of the network, as a working database for receiving topology updates;

discovering a topology of the network, and updating the second database with the discovered topology; and

selecting the second database as the active database.

- 2. (Original) The method of claim 1, wherein before discovering the topology of the network, the active database and the working database contain identical topologies of the network.
- (Original) The method of claim 1, comprising:
   selecting the first database as the working database;
   discovering a topology of the network, and updating the first database
  with the discovered topology; and
   selecting the first database as the active database.
- 4. (Original) The method of claim 1, comprising: selecting a third one of the plurality of databases as the working database;

discovering a topology of the network, and updating the third database with the discovered topology; and

selecting the third database as the active database.

5. (Original) The method of claim 1, comprising: monitoring a health of the network during the discovering based on the network topology in the active database.

- 6. (Original) The method of claim 1, wherein the discovering returns a connectivity of the network.
- 7. (Original) The method of claim 6, wherein the discovering returns a Layer 2 connectivity of the network.
- 8. (Original) The method of claim 1, comprising: detecting a fault in the network; comparing the topologies in the working and active databases; determining a source of the fault based on the comparing.
- 9. (Original) A method for managing a network using a plurality of databases, the method comprising:

discovering the network;

updating a topology representation of the network in a working database based on the discovering;

simultaneous with the discovering and the updating, providing access to a topology representation of the network in an active database; and exchanging connections of the working and active databases.

- 10. (Original) The method of claim 9, comprising: repeating the discovering, updating, providing, and exchanging.
- 11. (Previously Presented) The method of claim 9, wherein the exchanging is performed upon completion of the discovering of the network and updating the topology representation.
- 12. (Original) The method of claim 9, comprising partitioning a topology database to form the working database and the active database.
- 13. (Previously Presented) A system for managing a network using a plurality of databases, the system comprising:

means for discovering a topology of the network and updating a topology of the network in a first database connected to the means for discovering; and

means for connecting the means for discovering to the first database while at the same time connecting clients to a second database containing a topology of the network, and for connecting the clients to the first database after the means for discovering updates the topology of the network.

- 14. (Original) The system of claim 13, wherein the means for connecting exchanges connections of the first and second databases among the means for discovering and the clients after the means for discovering completes discovery of the network.
- 15. (Original) The system of claim 13, wherein after the means for discovering completes discovery of the network, the means for connecting reconnects the clients from the second database to the first database and connects the means for discovering to a third database.
- 16. (Original) The system of claim 13, comprising means for monitoring a health of the network based on the network topology in the second database.
- 17. (Original) The system of claim 13, comprising means for detecting a fault in the network, comparing the topologies in the first and second databases, and determining a source of the fault based on the comparing.
- 18. (Previously Presented) A machine readable medium comprising a computer program for causing a computer to perform:

selecting a first one of the plurality of databases that contains a topology of the network, as an active database accessible by clients for providing information related to the topology of the network in a READ only mode;

selecting a second one of the plurality of databases that contains a topology of the network, as a working database for receiving topology updates;

discovering a topology of the network, and updating the second database with the discovered topology; and

selecting the second database as the active database.

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19. (Original) The medium of claim 18, wherein the computer program causes the computer to perform:

selecting the first database as with the working database;

discovering a topology of the network, and updating the first database with the discovered topology; and

selecting the first database as the active database.

20. (Original) The medium of claim 18, wherein the computer program causes the computer to perform:

selecting a third one of the plurality of databases as the working database;

discovering a topology of the network, and updating the third database with the discovered topology; and selecting

the third database as the active database.

- 21. (Original) The medium of claim 18, wherein the computer program causes the computer to perform: monitoring a health of the network during the discovering based on the network topology in the active database
- 22. (Original) A machine readable medium comprising a computer program for causing a computer to perform

discovering the network;

updating a topology representation of the network in a working database based on the discovering;

simultaneous with the discovering and the updating, providing access to a topology representation of the network in an active database; and exchanging connections of the working and active databases.

23. (Original) The medium of claim 22, wherein the computer program causes the computer to perform:

repeating the discovering, updating, providing, and exchanging.

24. (Previously Presented) A method for managing a network using a plurality of databases, the method comprising:

connecting a first one of the plurality of databases that contains a topology of the network, as an active database accessible by clients for providing information related to the topology of the network in a READ only mode;

connecting a second one of the plurality of databases that contains a topology of the network, as a working database for receiving topology updates;

discovering a topology of the network, and updating the working database with the discovered topology;

connecting the working database as the active database; and connecting one of the plurality of databases as the working database, wherein the database connected as the active database and the database connected as the working database are different databases.

- 25. (Original) The method of claim 24, comprising:
  repeating the discovering of the network and the updating of the
  working database, the connecting of the working database as the active database,
  and the connecting of one of the plurality of databases as the working database.
- 26. (Previously Presented) The method of claim 1, wherein selecting the second database as the active database comprises exchanging connections of the first database and second database.
- 27. (Previously Presented) The method of claim 9, wherein the active database is inaccessible for updating the topology representation of the network.
- 28. (Previously Presented) The system of claim 13, wherein a database is inaccessible for updating the topology of the network when it is connected to the client.

- 29. (Previously Presented) The machine readable medium of claim 18, wherein selecting the second database as the active database comprises exchanging connections of the first database and second database.
- 30. (Previously Presented) The machine readable medium of claim 22, wherein the active database is inaccessible for updating the topology representation of the network.

## IX. EVIDENCE APPENDIX

None

# X. RELATED PROCEEDINGS APPENDIX

None